5

10

Web Server Architecture for Improved Performance

ABSTRACT

A web server that integrates portions of operating system code to execute substantially within user space to reduce context switching. The web server includes an application level interpreter, such as an HTTP interpreter, configured to process client requests. The web server typically includes a network interface dedicated to process traffic to and from the web server. The web server may include within its user space kernel device driver extensions enabling it to communicate directly with the network interface. The server may implement a polling architecture in which the server periodically monitors the interface for new requests. The web server typically includes a user space transmission protocol library that enables the server to perform its own network processing of requests and responses. The library may include TCP/IP drivers that are optimized or streamlined for to processing HTTP requests.